ABSTRACT OF THE DISCLOSURE

In a three-dimensional recording and reproducing apparatus having a recording medium including a plurality of recording layers stacked on a substrate and an optical system for converging a light irradiated from the substrate side on each of the plurality of recording layers to three-dimensionally record and reproduce information, the following equation is satisfied:

$$\lambda/4 \leq (1/8NB)(1/NB^2 - 1)NAF^4 \Delta d$$

where λ : Wavelength of the light;

NB : Refractivity of the substrate 3;

NAF: Numerical aperture of a focus lens 8 for converging a light;

Δd : Positional range in the optical axis direction in which exists a recording layer on which the light is to be converged.

A light spot is focused on each layer of the multi-layer structured disc to record and reproduce highly reliable data in a high density.